

Work Order ID 81296

March-12-12 4:41:59 PM

ASAP

81296

Page 1

Item ID: D350-591-214

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Heli-Access-Step, Short RH

Start Date: 12/03/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 26/03/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/03/13

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr	SL	0.00	MLJ 12/04/13
D3078	A			
DSI 9472	A			

100

100

DOCUMENT CONTROL

DC

Document Control

Memo

0.00

Photocopy bluefile and type labels as per PPP D350-591-214 CHG003

JB S. Zulliger

110

110

Large Fab

Large Fab

Memo

0.00

1-Cut D2622-120 extrusion to 59.75" long as per Dwg D3078
2-Drill extrusion as per Dwg D3078 using Jig DT8680 for rivets.
3-Deburr

6/12/13

12.03.20
AC 12.03.20

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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N900040100

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NS1

Revision ID:

Item Name: Heli-Access-Step, Short RH

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NS2

Start Date: 12/03/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 26/03/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

120

QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

PL 12-03-20

bx

Ø

130

130

Large Fab

Large Fab

0.00

Memo

0.00

1-Bevel end for welding FWD ONLY
2-Weld Support using Jig DT8681, weld Fwd End Plate as per QSI 004 & Dwg
D3078

A/R Aluminum Rod *119185*
3-Grind End Plate flush *120169*

PL 12-03-22

bx

Ø

140

140

QC

QC9- Inspect visual per QSI004- Fusion Welds

0.00

Memo

0.00

PL 12-03-28

bx

Ø

Quality Control

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC5- Inspect part completeness to step on W/O

0.00

5/2/3/28

150

QC

Quality Control

160

Chemical Conversion Coat per QSI005 4.1

0.00

160

HandFinish

Hand Finishing

Memo

0.00

6X 6/12/3/28
RH

170

QC3- Inspect Part Finish

0.00

170

QC

Quality Control

Memo

0.00

6/12/3-38.

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NS1**Revision ID:****Item Name:** Heli-Access-Step, Short RH

Stop

NS2**Start Date:** 12/03/2012 **Start Qty:** 6.00***6*****Cust Item ID:****Required Date:** 26/03/2012 **Req'd Qty:** 6.00***6*****Customer:****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:**

Run Start

NR1**QC:****Date:****SPC (Y/N):****Date:**

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200 *200* Large Fab	Large Fab	0.00							<i>ll</i>
	Memo	0.00							
	1- Rivet Leg Assembly as per Dwg D3078.								
	2-Bevel Aft end for welding								
	3-Inspect for foreign object as per QSI 024								
	4-Weld Aft End Plate as per QSI 004 & Dwg D3078 A/R Aluminum Rod <u>119785</u>								
	5-Grind End Plate flush								
210 *210* QC Quality Control	QC10- Inspect visual per QSI004- ground welds	0.00	<i>8-12-12</i>						<i>ll</i>
	Memo	0.00							

*ll**Ac 12.04.11**Ac 12**8-12-12**76**Ry*

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Item ID: D350-591-214**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Item Name:** Heli-Access-Step, Short RH**Stop*****NS2*****Start Date:** 12/03/2012 **Start Qty:** 6.00***6*****Cust Item ID:****Required Date:** 26/03/2012 **Req'd Qty:** 6.00***6*****Customer:****Reference:****Approvals:** **Process Plan:****Date:****Tooling:****Date:****Run Start*****NR1*****QC:****Date:****SPC (Y/N):****Date:****Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

220

QC5- Inspect part completeness to step on W/O

0.00

220

QC

Quality Control

Scallopiz

(x6)

BH

230

Chemical Conversion Coat per QSI005 4.1

0.00

230

HandFinish

Hand Finishing

240

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

240

Powdercoat

Powder Coating

W120222

Memo

START TIME:

11:30 0.00
320 °F
12:00

OVEN TEMPERATURE:

FINISH TIME:

6X ✓

M/L
12/04/13

6 ✓ 12/04/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

250

250

HandFinish

Hand Finishing

Wing Walk as per dwg QSI005 4.4 Batch 120902

0.00

6

8

OP

12/04/17

260

260

QC

Quality Control

QC3- Inspect Part Finish

0.00

502kulis

10

10

10

RH

270

270

Packaging

Packaging

Pick Kit

0.00

Memo

0.00

10

10

12/04/18 J3

OP

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Setup

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NS1

Revision ID:

Item Name: Heli-Access-Step, Short RH

Stop

NS2

Start Date: 12/03/2012 Start Qty: 6.00

6

Cust Item ID:

Required Date: 26/03/2012 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

280

280

QC

Quality Control

QC4- 100% Inspect kits for completeness

0.00

0.00

5/2/12/12

(66)
RH

290

290

Packaging

Packaging

0.00

Memo

0.00

Identify and pack for shipping as per PPP D350-591-214

Location: _____

PPP Rev: _____

6x

SP
12-04-19

300

300

QC

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

MJ 12/04/20

Quality Control

12-04-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Page 1

Work Order ID: 81296

81296
D350-591-214

Parent Item: D350-591-214

Parent Item Name: Heli-Access-Step, Short RH

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:B05.10.14Modified step 10KJ/EC

IPP Rev:C 06-06-19 Added D2732-030 AS PER DS19294 JLM

IPP Rev:C 06-06-27 Revised as per DS19340 JLM IPP Rev:D

10.11.15 update qty on AN4-11A DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120C		Manufactured	No			110	Each	78.7300	0.5	3		**	

D2622-120C

Step Extrusion

Location	Loc Qty	Loc Code
HALL	16.37	
46910	2	
64409	6	
66970	7.7	
68293	0.25	
72131	0.42	
WA013	62.36	
75781	2.4	
77612	59.96	

D3063-1

Manufactured No

130 Each 65.0000 1

**

12.03.22

D3063-1

Support

Location	Loc Qty	Loc Code
WA016	65	
66182	5	
71886	60	

6

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Work Order ID: 81296

Parent Item: D350-591-214

Parent Item Name: Heli-Access-Step, Short RH

81296
D350-591-214

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 6.00

Required Qty: 6.00

D3067-1

Manufactured No

130 Each

178.0000

1

6

**

12.03.22

D3067-1

End Plate

Location	Loc Qty	Loc Code
WA	152	
78608	92	6
80881	60	
WA016	26	
67582	2	
68214	1	
79607	23	

D3066-1

Manufactured No

200 Each

66.0000

2

12

**

381968 (x6) Ae 12.04.11

D3066-1

Spacer

Location	Loc Qty	Loc Code
WA	66	
78605	66	(x6)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item: D350-591-214

D350-591-214

Parent Item Name: Heli-Access-Step, Short RH

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 6.00

Required Qty: 6.00

MS20600-AD4W4

Purchased

No

200

Each

2,478.000

16

96

**

MS20600-AD4W4

Rivets

m12104 x95 *Ac 12.04.11*

m121390 x1

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST321	2473	
116188	59	
117364	253	
117601	200	
117885	195	
118840	1089	
119860	30	
119883	155	
120308	72	
120769	420	
WA018	5	
116712	5	

D3065-041

Manufactured

No

200

Each

44.0000

1

6

**

D3065-041

Step Leg Assembly Hi

Ac 12.03.29

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
WA	44	
66149	0	
78799	40	
79336	1	
79419	3	

x6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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D350-591-214

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Parent Item Name: Heli-Access-Step, Short RH

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 6.00

Required Qty: 6.00

D3067-1

Manufactured No

200 Each 178.0000

1 6

**

D3067-1

End Plate

12-04-18

Location	Loc Qty	Loc Code
WA	152	
78608	92	2
80881	60	
WA016	26	
67582	2	
68214	1	
79607	23	8

AN4-16A

Purchased No

270 Each 122.0000

4 24

**

AN4-16A

Bolt

JB 8P

D2732

Manufactured No

270 f 197.3353

1 6

**

D2732

Rubber Extrusion

22719980
27120495

JB 8P 12/04/18

Location	Loc Qty	Loc Code
ST358	122	
119980	75	
120498	47	

Sht

→ needed
10/16/13
Cut 3.00" long, qty 4

10987

W/O:		WORK ORDER CHANGES							
DATE	STEP	PROCEDURE CHANGE			By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Parent Item: D350-591-214

D350-591-214

Parent Item Name: Heli-Access-Step, Short RH

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 6.00

Required Qty: 6.00

AN3-35A

Purchased

No

270

Each

147.0000

2

12

✓

**

AN3-35AS46
Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST353	147	
120187	47	
120644	50	
120717	50	

120187

AN4-11A

Purchased

No

270

Each

246.0000

2

12

✓

**

AN4-11AS46
Bolt

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST356	246	
117872	46	6X117872
118706	100	6X118706
120731	100	

AN960JD416

NAS1149D0463J

Purchased

No

270

Each

14.0000

12

72

✓

AN960.JD416S46
Washer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST351	14	
116289	14	

121255 JB SP

D2230-3

Manufactured

No

270

Each

187.0000

1

12

D2230-3S46
Lug

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST480	187	
53881	4	
70973	1	
80009	182	

B81558 SP 12/04/18
12-A-PA,

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item: D350-591-214

Parent Item Name: Heli-Access-Step, Short RH

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 6.00

Required Qty: 6.00

D2856-400

Manufactured No

270

f

202.0445

0.6

3.6

**

D2856-400

Abrasion Strip

JB SP

S6
measured
S7/4/19

cut 7.20" long, qty 1

MS21042L3

Purchased No

270

Each

3,226.000

2

12

**

121222 JB R

S46 *MS21042L3*

Nut

Location Loc Qty Loc Code

ST300 3226

117441 16

117885 32

118451 5

118927 3

119017 2990

119075 180

119017

Purchased No

270

Each

1,367.000

4

24 ✓

JB R 12/04/18

S6 *AN4-13A*

Bolt

Location Loc Qty Loc Code

ST357 1367

119449 59

120187 408

120422 500

120770 400

120422

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Parent Item Name: Heli-Access-Step, Short RH

Start Date: 12/03/2012

Required Date: 26/03/2012

Start Qty: 6.00

Required Qty: 6.00

D2230-1

Manufactured No

270

Each

196.0000

2

12

**

80008 JB SP

D2230-1

Lug
fl

Location	Loc Qty	Loc Code
ST	187	
78596	187	
ST480	9	
67826	6	
70974	3	

MS21042L4

Purchased No

270

Each

3,831.000

6

36

**

JB SP

MS21042L4

Nut
fl

Location	Loc Qty	Loc Code
ST300	3831	
117441	51	
117601	157	
118451	133	
119017	200	
119075	3290	

AN960JD10

NAS1149D0363J Purchased

No

270

Each

0.0000

4

24

**

119075
121243 JB SP 12/04/18

AN960JD10

Washer

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6

REF FAA STC: SH967NE

For D350-591-213/-214/-215/-216 steps, customers have the option of installing D2732-030 cushion under the clamps to accommodate varying crosstube diameters and to improve fit, as indicated in Installation Instructions D350-591. This Service Instruction adds longer AN4-16A bolts to the parts list to allow installation of these cushions. See Figure 1 on sheet 2 of this service instruction for reference. Installation of the D2856-400-720 Abrasion Strips per Installation Instructions D350-591 is not required when the cushions are installed.

For D350-591-213/-214/-215/-216 steps at CHG 003, the parts list of D350-591 Rev. G and ICA-D350-591 Rev. 2 is amended as follows:

ADD:

Qty -213	Qty -214	Qty -215	Qty -216	Part Number	Description
X				D350-591-213	<i>Heli-Access-Step</i> ™, Short Step – High Skid, LH
	X			D350-591-214	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X		D350-591-215	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X	D350-591-216	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
4	4	4	4	AN4-16A	BOLT

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 81296 MLC

12/03/13

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-0-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	09.08.05
CERT. NO.:	SH92-6
ISSUE NO.:	11

A	NEW ISSUE	RF	09.08.05
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>9P</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>IP</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>N/A</i>	DSI 9472	SHEET 1 OF 2
APPROVED	<i>M</i>	TITLE	SCALE
DE APPR.	<i>M</i>	BOLT ADDITION	NTS
DATE	09.08.05	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

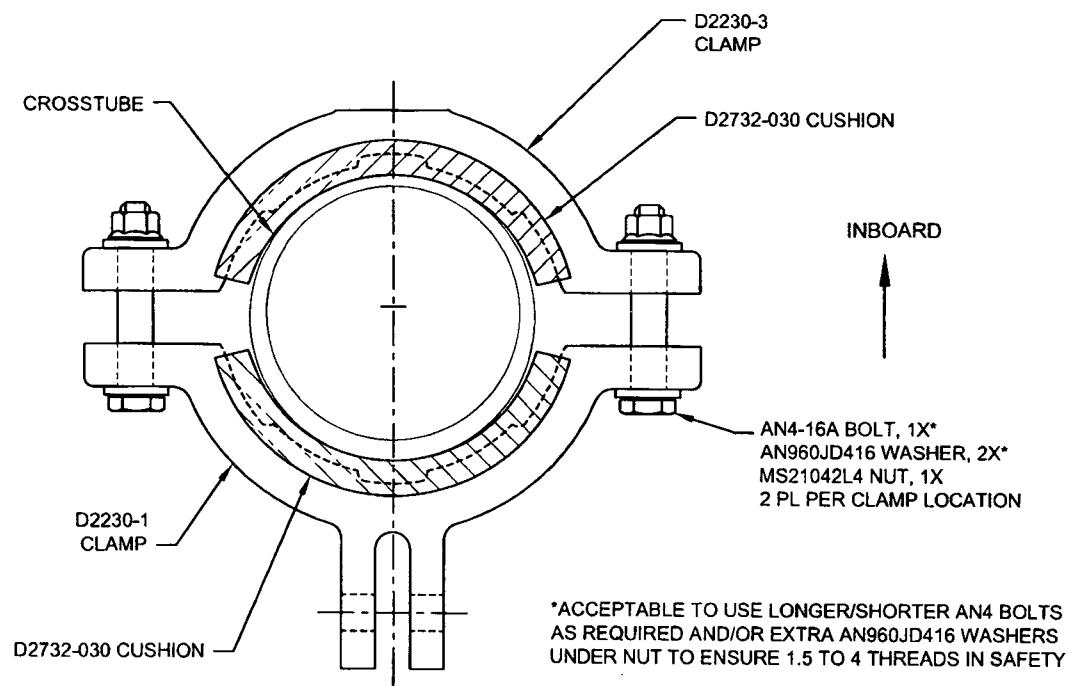


FIGURE 1: CLAMP DETAIL
OPTIONAL CLAMP CONFIGURATION

81296

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	<i>[Signature]</i>
D. SHEPHERD (DE # 02)	
DATE:	09.08.05
CERT. NO.:	SH92-6
ISSUE NO.:	11

DESIGN	<i>9P</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>9P</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>N/A</i>	DSI 9472	SHEET 2 OF 2
APPROVED	<i>[Signature]</i>	TITLE	
DE APPR.	<i>[Signature]</i>	SCALE	
DATE		NTS	
09.08.05		BOLT ADDITION	
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W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD . HAWKESBURY, ONTARIO, CANADA		
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3078		
DATE 02.09.11	TITLE STEP ASSEMBLY, HI SHORT			• REV. A SHEET 1 OF 2 SCALE NTS
A	02.09.11	NEW ISSUE		

RELEASED
02.09.20 *[Signature]*

Part No.	Description	QTY -041	QTY -042
D3078-041	Step Assembly, High Short (LH)	X	
D3078-042	Step Assembly, High Short (RH)		X
D2622-60	STEP EXTRUSION	1	1
D3063-1	SUPPORT	1	1
D3065-041	LEG ASSEMBLY	1	1
D3066-1	SPACER	2	2
D3067-1	END PLATE	2	2
MS20600AD4W4	RIVET	16	16

GENERAL NOTES:

- 1) -041 SHOWN, FOR -042 INSTALL D3063-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

81296

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

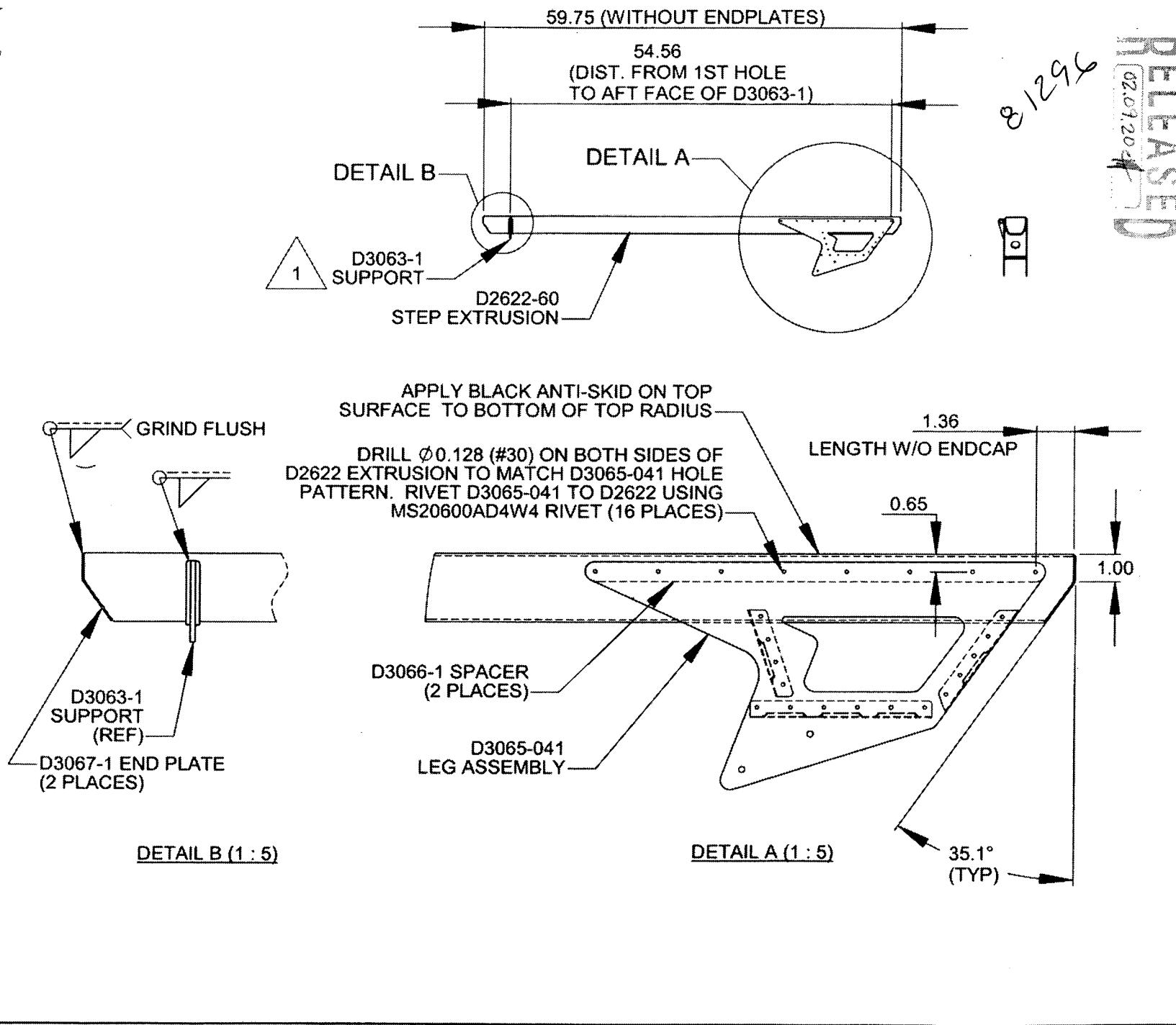
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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DESIGN	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
CHECKED	DRAWN BY	APPROVED	DRAWING NO.
DATE	TITLE	SCALE	REV. A
02.09.11	STEP ASSEMBLY, HI SHORT	1:20	SHEET 2 OF 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

REFERENCE ONLY

DART AEROSPACE LTD.

D350-591
Page 23 of 23

Qty -211	Qty -212	Qty -213	Qty -214	Qty -215	Qty -216	Qty -311	Qty -312	Part Number	Description
X								D350-591-211	<i>Heli-Access-Step™</i> , Long Step – High Skid, LH
X								D350-591-212	<i>Heli-Access-Step™</i> , Long Step – High Skid, RH
X			X					D350-591-213	<i>Heli-Access-Step™</i> , Short Step – High Skid, LH
			X					D350-591-214	<i>Heli-Access-Step™</i> , Short Step – High Skid, RH
			X					D350-591-215	<i>Heli-Access-Step™</i> , Short Step – Low Skid, LH
			X					D350-591-216	<i>Heli-Access-Step™</i> , Short Step – Low Skid, RH
					X			D350-591-311	<i>Heli-Access-Step™</i> , Long Step – High Skid, LH
						X		D350-591-312	<i>Heli-Access-Step™</i> , Long Step – High Skid, RH
1								D3070-041	STEP ASSEMBLY (HIGH-LONG, LH)
1								D3070-042	STEP ASSEMBLY (HIGH-LONG, RH)
	1							D3078-041	STEP ASSEMBLY (HIGH-SHORT, LH)
	1							D3078-042	STEP ASSEMBLY (HIGH-SHORT, RH)
		1						D3168-041	STEP ASSEMBLY (LOW-SHORT, LH)
		1						D3168-042	STEP ASSEMBLY (LOW-SHORT, RH)
					1			D3272-041	STEP ASSEMBLY (HIGH-LONG, LH)
					1			D3272-042	STEP ASSEMBLY (HIGH-LONG, RH)
4	4							D2182B035	RUBBER CUSHION
	2	2	2	2	2			D2230-1	MOUNTING LUG
	2	2	2	2	2	4	4	D2230-3	MOUNTING LUG
8	8					2	2	D2274	RADIUS BLOCK
								D2618	BUSHING
4	4	4	4	4	4			D2732-030	CUSHION
2	2	1	1	1	1	2	2	D2856-400-720	ABRASION STRIP
2	2							D3064-1	CLAMP
1	1							D3079-041	SUPPORT ASSEMBLY
4	4							D3080-1	CLAMP
						2	2	D3235-1	MOUNTING LUG
						1	1	D3278-041	SUPPORT ASSEMBLY
2	2	2	2	2	2	2	2	AN3-35A	BOLT
10	10	2	2	2	2			AN4-11A	BOLT
		4	4	4	4	8	8	AN4-13A	BOLT
						2	2	AN5-36A	BOLT
4	4	4	4	4	4	4	4	AN960JD10	WASHER
20	20	12	12	12	12	16	16	AN960JD416	WASHER
						4	4	AN960JD516	WASHER
2	2	2	2	2	2	2	2	MS21042L3	NUT
10	10	6	6	6	6	8	8	MS21042L4	NUT
						2	2	MS21042L5	NUT
						1	1	*DSI 9410-011	STEP MODIFICATION KIT

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.

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Revision: **G**
Date: 08.10.06

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-591 REV. G OR EARLIER
AND
INSTRUCTIONS OF CONTINUED AIRWORTHINESS ICA-D350-591 REV. 2 OR EARLIER

REF CANADIAN STC: SH92-6 **REFERENCE ONLY**
REF FAA STC: SH967NE

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	X			D350-591-214	<i>Heli-Access-Step</i> ™, Short Step – High Skid, RH
		X		D350-591-215	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH
			X	D350-591-216	<i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH
4	4	4	4	AN4-16A	BOLT

CANADA	
DEPARTMENT OF TRANSPORT	
AIRCRAFT CERTIFICATION	
BRANCH	
DAO # 01-O-01	
APPROVED	
BY:	D. SHEPHERD (DE # 02)
DATE:	09.08.05
CERT. NO.:	SH92-6
ISSUE NO.:	11

A	NEW ISSUE	RF	09.08.05
REV.	DESCRIPTION	BY	DATE
DESIGN	90	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	IP	DRAWING NO.	REV. A
MFG. APPR.	NDA	DSI 9472	SHEET 1 OF 2
APPROVED	MN	TITLE	SCALE
DE APPR.	MN	BOLT ADDITION	NTS
DATE	09.08.05	COPYRIGHT © 2009 BY DART AEROSPACE LTD	
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